DEP INFORMATION SHEET

EROSION CONTROL MIX FOR MULCH

date: April 2003 **contact: Marianne Hubert (207) 287-4140**

Erosion control mix is long-term mulch that creates a good buffer around disturbed sites such as buildings, roads and drainage ways. Erosion control mix can be used as a permanent ground cover, as an overwinter stabilization mulch, or left to naturalize. It is not designed to support grass vegetation, but legumes or woody vegetation may be established to add stability.

Erosion control mix must not be used in areas of concentrated water flows. Evidence of groundwater seepage on slopes may require the erosion control mix to be replaced with riprap.

SPECIFICATIONS

Erosion control mix can be manufactured on or off the project site. It consists primarily of organic material, separated at the point of generation, and may include: shredded bark, stump grindings, composted bark, or flume grit and fragmented wood generated from water-flume log handling systems. Wood chips, ground construction debris, reprocessed wood products or bark chips are not acceptable as the organic component of the mix.

Erosion control mix is composed of a well-graded mixture of particle sizes and may contain rocks less than 4" in diameter. Erosion control mix must be free of refuse, physical contaminants, and material toxic to plant growth.

COMPOSITION

The mix composition should have the following composition:

- The organic matter content is between 80 and 100%, dry weight basis.
- Particle size by weight is 100 % passing a 6" screen and a minimum of 70 %, maximum of 85%, passing a 0.75" screen.
- The organic portion needs to be fibrous and elongated.
- Large portions of silts, clays or fine sands are not acceptable in the mix.
- Soluble salts content is less than 4.0 mmhos/cm.
- The pH should fall between 5.0 and 8.0.

INSTALLATION

- When used as mulch, the length and steepness of the slope determines the appropriate **thickness** of the erosion control mix. **Erosion control mix is not recommended for 2:1 slopes or greater.** For other slopes, the following minimums apply:
  On slopes of 3:1 or less: 2 inches plus an additional 1/2 inch per 20 feet of slope up to 100 feet**;**

On slopes between 3:1 and 2:1: 4 inches plus an additional 1/2 inch per 20 feet of slope up to 100 feet.

The thickness of the mulch at the bottom of the slope needs to be:

	< 3:1 slope	*slopes between 3:1 and 2:1*
< 20' of slope	*2.0"*	*4.0"*
< 60' of slope	*3.0"*	*5.0"*
< 100' of slope	*4.0"*	*6.0"*

- The mulch may be placed with a hydraulic bucket or with a pneumatic blower or by hand.
- It should be placed evenly to provide 100 % soil coverage, with the soil totally invisible.
- It can be used as a stand alone reinforcement:
  - On slopes 2 horizontal to 1 vertical or less.
  - On frozen ground or forested areas.
  - At the edge of gravel parking areas and areas under construction.
- **Other reinforcement BMPs (i.e. riprap) should be used:**
  - On slopes with groundwater seepage;
  - At low points with concentrated flows and in gullies;
  - At the bottom of steep perimeter slopes exceeding 100 feet in length (large up-gradient watershed);
  - Below culvert outlet aprons; and
  - Around catch basins and closed storm systems.

MAINTENANCE

- The mulched area should be inspected regularly and after each large rainfall. Any required repairs should be made immediately, with additional erosion control mix placed on top of the mulch to reach the recommended thickness. When the mix is decomposed, clogged with sediment, eroded or ineffective, it must be replaced or repaired.
- Erosion control mix mulch should be left in place. Vegetation adds stability and should be promoted.
- If the mulch is removed, it should be spread out into the landscape.

OTHER USES

Beside the temporary/semi-permanent stabilization of slopes, erosion control mix has been used successfully in many applications. It has been used on nature trails to establish a stable base that is resistant to foot traffic and to stabilize areas covered with snow and that may erode with the spring thaw. It has also been used in construction yards to mitigate the mud.

In these applications, the erosion control mix application rate will need to be adjusted for the site conditions, use and long-term effectiveness. With time, the organic component of the erosion control mix will decompose and become ineffective. Thus, the blanket of erosion control mix must be adjusted for composition and thickness. Any required repairs should be made immediately, with additional erosion control mix placed on top to reach the desired thickness.

FOR MORE INFORMATION

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